IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Applicant:

Mazany, et al.

Examiner: P. Marcantoni

Serial No.:

09/871,765

Group Art Unit:

1755

Filed:

June 1, 2001

Date:

August 12, 2004

For:

INORGANIC MATRIX COMPOSITIONS COMPOSITES AND PROCESS

OF MAKING THE SAME

Mail Stop 313 (c) Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

RECEIVED

AUG 1 3 2004

OFFICE OF PETITIONS

INFORMATION DISCLOSURE STATEMENT

Sir:

This invention relates to a modified alkali silicate composition for forming an inorganic network. The modified alkali silicate matrix is made by reacting an alkali silicate (or its precursors such as an alkali hydroxide, a SiO₂ source and water), an acidic oxoanionic compound such as phosphoric acid, water and optionally one or more multivalent cation(s) selected from Groups 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 or 16 of the periodic table such as an alkaline earth salt, and optional processing aids. An inorganic matrix composite can be prepared by applying a slurry of the modified aqueous alkali silicate composition to a reinforcing medium and curing the composite at a temperature from about 15°C up to about 1000°C+ and a pressure from about ambient up to about 20,000 psi, and optionally under a vacuum of about ambient to about 10⁻³ torr. The composite can be shaped by compression molding as well as other known fabrication methods.

As authorized and encouraged under 37 C.F.R. §1.97-1.99, applicant hereby cites as a means of complying with the duty of disclosure set forth in 37 C.F.R. §1.56, the following patents and/or documents, required copies enclosed, which the Examiner should consider with respect to the above-identified United States Patent Application:

AUG 1 3 2004

4.4.4	4.6.5						
	U.S. DOCUMENTS	E OF PETITIONS					
PATENT/DOCUMENT NO.	DATE	INVENTOR					
3,933,689	January 20, 1976	Ray et al.					
3,935,018	January 27, 1976	Ray et al.					
3,964,919	June 22, 1976	Ray et al.					
3,989,532	November 2, 1976	Ray et al.					
4,888,311	December 19, 1989	Davidovits et al.					
4,936,939	June 26, 1990	Woolum					
	FOREIGN DOCUMENTS	*					
PATENT/DOCUMENT NO. DATE COUNTRY							
32 46 604	June 20, 1984	DE					
ART	ICLES/OTHER DOCUMEN	TS					
Chemical Abstracts, vol. 85, Tanaka: "Nonflammable inor							
Chemical Abstracts, vol. 93, et al. "Hardening and Waterp							
Chemical Abstracts, vol. 103 "Stabilization of weak founda		abstract no. 41661e,					
Chemical Abstracts, vol. 103 "Strengthening of soil foundates							

In accordance with 37 CFR 1.98(a)(2)(i) enclosed are copies of only the foreign

and non-patent documents for the express purpose of providing the Patent and

Trademark Office with an ample opportunity to evaluate the same and to arrive at an

independent assessment of its materiality, if any, with regard to the examination of

the application.

In reviewing the enclosed copy of the above publication, the Examiner is

requested to ignore any underscoring or highlighting which may appear because such

markings may or may not have any relationship to the subject matter of the above-

identified application. The copy being submitted with this Information Disclosure

Statement is the best copy available at this time.

An examination of the present application considering the above documents is

requested.

Respectfully submitted,

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DJH/lb

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(330) 535-2220

Attorney Docket No.: ,200EP006 (GOODR-A-1-RCE)

Form **PTO-1449**

U.S. Department of Commerce Patent and Trademark Office

LIST OF PRIOR ART CITED BY APPLICANT

(Use several sheets if necessary)

Atty. Docket No.:

200EP006 (GOODR-A-1-RCE)

Serial No.: 09/871,765

Applicant: Mazany et al.

Filing Date: June 1, 2001

Group: 1755

11.5	DATENT	DOCUMENTS
U.S.	PAIENI	DOCUMENTS

Examiner Initial		Document Number	Date	Name	Clas s	Subclass	Filing date in appropriate
	AA	3,933,689	January 20, 1976	Ray et al.			
	AB	3,935,018	January 27, 1976	Ray et al.			
	AC	3,964,919	June 22, 1976	Ray et al.		PAEN	ED
	AD	3,989,532	November 2, 1976	Ray et al.	-		-001
	AE	4,888,311	December 19, 1989	Davidovits et al.		AUG 13	PETTHONS
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FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Clas s	Subclass	Translation Yes No
· •	AL	32 46 604	June 20, 1984	DE			
	АМ						
	AN		-				
	AO						
	· AP						

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Chemical Abstracts, vol. 85, no. 8, 23 August 1976; abstract no. 51069s, M. Tanaka: "Nonflammable inorganic foam" XP000063264
 AS	Chemical Abstracts, vol. 93, no. 4, 28 July 1980, abstract no. 308J0w, J. Ueda et al. "Hardening and Waterproofing soft ground" XP000063866
АТ	Chemical Abstracts, vol. 103, no. 6, 12 August 1985, abstract no. 41661e, "Stabilization of weak foundations" XP000064227

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-14	Form PTO-1449 U.S. Department of Commerce Patent and Trademark Office				Atty. Docket No.: Serial No.: 09/871,765				
					200EP006 (GOODR-A-1)				
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		OTHE	R PRIOR ART (Including	g Author, Title	, Date, Pertinent Page	es, Etc.)			
	AR	Chemical Al foundation v	ostracts, vol. 103, no. 7 with neutral grout" XPO	12, 23 Septer 000064371	nber 1985, abstract r	io. 92158d, "S	trengthening	of soil	
	AS						,		
·	АТ								
EXAMINER		181	DATE COI	NSIDERED					
*EXAMINER: II	nitial if re confor	eference considered mance and not con	d, whether or not citationsidered. Include copy of	on is in confor of this form w	mance with MPEP 60	9; Draw line th	rough citation	n if not in	